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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/636,117	08/07/2003	Michael E. Buhl	502337	1586
53609	7590	07/28/2006		
REINHART BOERNER VAN DEUREN P.C. 483 NORTH MULFORD ROAD SUITE 7 ROCKFORD, IL 61107			EXAMINER CECIL, TERRY K	
			ART UNIT	PAPER NUMBER
			1723	

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/636,117	BUHL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mr. Terry K. Cecil	1723	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 7-5-2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION*****Claim Rejections - 35 USC § 103***

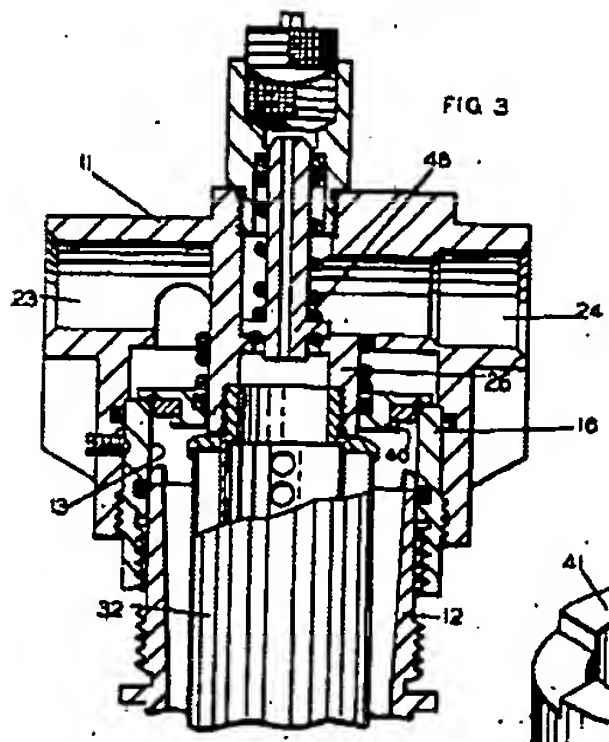
1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 1-5, 7-12, 15-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Suntec Model PRV-38 literature (hereinafter "Suntec") in view of Scavuzzo (U.S. 2,932,400). Suntec discloses a normally-closed valve assembly and valve actuator as required by the claims in an oil burner system. Suntec also discloses a filter upstream of the valve assembly (see the drawings thereof) but does not teach the valve assembly and filter combined via a filter head arrangement including a filter mounting stub. However, such is taught by Scavuzzo '400.



Scavuzzo teaches a filter head 11 including a filtering mounting stub 26, an annular flange and a normally closed valve. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the valve and filter assemblies of Suntec to be combined such that a filter head is formed, as in

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Scavuzzo, since Scavuzzo teaches the benefit of preventing spills of fluid when the filter element is changed (col. 1, lines 30-38 and col. 3, lines 24-40). Having the filter element of Suntec immediately upstream of the normally-closed valve would prevent the loss of fluid from downstream thereof when the filter element is replaced. Upon modification, all the limitations of the aforementioned claims are met.

*Concerning applicant's new limitation requiring fluid communication between the inlet port and filter head exit port when the filter is not mounted and nothing is mounted on the filter mounting stub, such is also taught by Scavuzzo. Support for applicant's amendment is shown in his figure 1, wherein nothing is mounted to the stub. In Scavuzzo's figure 1, when nothing is mounted to the filter stub (including the valve 40, removal of which necessarily requires the removal of sleeve 16), the inlet port is also in fluid communication with the filter head exit port.*

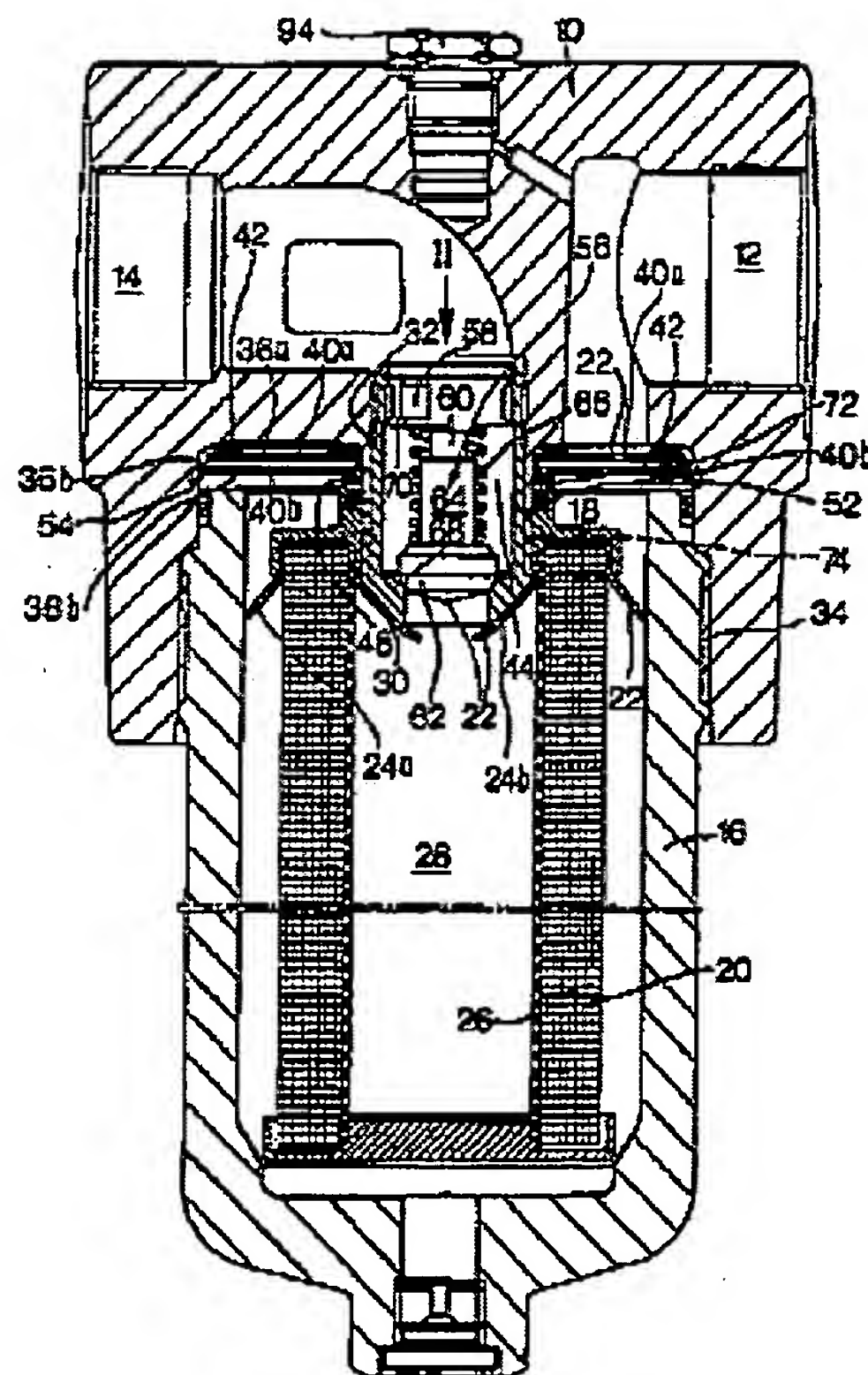
3. Claims 6, 13-14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Suntec in view of Moscaritolo (U.S. 6,471,853). These claims differ in that they require a vacuum gauge port defined in the outlet side of the body of the filter head. Moscaritolo teaches a port for a sensor (for measuring pressure e.g. col. 2, line 17). It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the port of Moscaritolo in the outlet side of the filter head of the modified Suntec, since Moscaritolo teaches the benefits of measuring filter performance characteristics in order to determine performance and whether a the filter element needs replacement (col. 1, lines 12-19).

### *Response to Arguments*

4. Applicant's arguments, filed 7-5-2006, with respect to the claims have been fully considered and are persuasive. The final rejection of 6-8-2006 has been withdrawn. Also, as shown in the action above, applicant's new limitation requiring fluid communication between the inlet port and filter head exit port when the filter is not mounted and nothing is mounted on the filter mounting stub, is taught by Scavuzzo.

### *Other Pertinent Art*

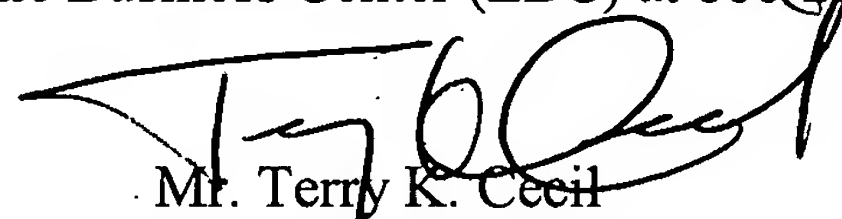
5. Before amending the claims applicant should also consider Sann et al. (U.S. 5,560,824).



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6. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (571) 272-1138 at the Carlisle campus in Alexandria, Virginia for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:30a to 4:30p, on at least four days during the week M-F.
- Wanda Walker, the examiner's supervisor, can be reached at (571) 272-1151 if attempts to reach the examiner are unsuccessful.
- The Fax number for this art unit for official faxes is (571) 273-8300.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mr. Terry K. Cecil  
Primary Examiner  
Art Unit 1723

TKC  
July 25, 2006